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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,397	01/30/2004	Tomoyuki Ito	008601-0307943	2672

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PILLSBURY WINTHROP SHAW PITTMAN, LLP  
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EXAMINER
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MONDT, JOHANNES P

ART UNIT	PAPER NUMBER
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3663

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/767,397	<b>Applicant(s)</b> ITO ET AL.	
	<b>Examiner</b> JOHANNES MONDT	<b>Art Unit</b> 3663	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11, 15-20, 24-29, 33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) 15-20 and 24-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 33 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/09 has been entered.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed non-zero angle and tool must be shown and identified in Figures 1 and 3 or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. ***Claims 11 and 33-34*** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. In particular, the limitation "bellows mechanism" (introduced into the claims through lines 7-8 of claim 11), and more particularly, the thus recited "mechanism" associated with the bellows (8) lacks adequate written support: Nowhere in the specification as originally filed including original claims has a mechanism associated with the bellows been specifically identified, and hence said mechanism constitutes new matter.

5. ***Claims 11 and 33-34*** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably

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convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. The recitation in one claim of bellows and a tool does not correspond with a specific embodiment as disclosed in the original specification including original claims. Specifically, bellows only feature in apparatus without specific identification or even mere recitation of tools. Paragraphs [0029]-[0031] recite specific instruments, such as a television camera, an eddy current probe and an array type ultrasonic probe, but said instruments are not characterized as “tools”, and hence an adequate written description in which “tool” is defined cannot be said to exist for embodiments with bellows. Therefore, the combination of the recitation of “bellows” and “tool” is not supported by a single embodiment and hence constitutes new matter.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 11 and 33-34** recite, through claim 11, the limitation "the lower portion", see line 7. There is insufficient antecedent basis for this limitation in the claim.

8. **Claims 11 and 33-34** recite, through claim 11 the limitation "into a jet pump of the nuclear reactor" on line 4. There is insufficient antecedent basis for this limitation in the claim. It is particularly noted that not every vessel of a nuclear reactor has a jet pump, while the preamble claims the apparatus “for performing an operation inside a vessel of a nuclear reactor” without any further qualification.

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9. **Claims 11 and 33-34** recite, through claim 11 the limitation "a tapered surface of an opening of the jet pump" on line 16. There is insufficient antecedent basis for this limitation in the claim. It is particularly noted that not every jet pump of a nuclear reactor has a tapered surface, quite apart from the already noted fact that not every vessel of a nuclear reactor has a jet pump in the first place, while the preamble claims the apparatus "for performing an operation inside a vessel of a nuclear reactor" without any further qualification.

10. **Claims 11 and 33-34** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The metes and bounds of the claimed invention are vague and ill-defined due to the introduction of new matter (see section 4 above), whereby the claims are rendered indefinite.

11. **Claims 11 and 33-34** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The metes and bounds of the claimed invention are vague and ill-defined due to the introduction of new matter (see section 5 above), whereby the claims are rendered indefinite.

### ***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. **Claims 11 and 33-34** are rejected under 35 U.S.C. 102(e) as being anticipated by Houser et al (US 2003/0060685 A1).

*Houser et al* teach an apparatus (Figures 62-68 and [0191]-[0201]) comprising:

an apparatus body 805/810/820 having an elongated tubular member 820 having an upper portion 805 or 805/810 that defines a top end of the apparatus body;

a weight 855 having an upper portion that is coupled to a lower portion of the tubular member (820) via a bellows mechanism (see [0191] for description of the bellows mechanism);

a guide rod 853 ([0199]) abuttedly connected to the lower portion of the weight (855), the lower portion of the weight defining a bottom end of the apparatus body, the guide rod being elastically biased toward a predetermined non-zero angle relative to a vertical axis of the apparatus ([0199]: note that the guide rod 853 has a variable incline, varying between slightly curved and complete J-shape, hence necessarily having a bias to a non-zero angle relative to a vertical axis of the apparatus (i.e., relative to 820) to enable it to pass through, move and reposition easily, see [0199].

The following limitations are functional and describe intended use only:

"sized to be essentially fully inserted...." (lines 3-4); "for imparting gravitational force" (line 6); "configured to conduct the operation" (lines 13-14); "wherein, the biased, predetermined non-zero angle of the guide rod facilitates..." (lines 15-16); " wherein,

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after the guide rod is inserted into the jet opening.....to conduct the operation” (all of the final three lines of claim 11).

Since the nature of the operation and the conditions (including relative dimensions of positively recited and not-positively recited structures such as the jet pump, the opening with tapered surface of the jet pump, and the nuclear reactor) under which the operation needs to be conducted are left unspecified said limitations do not carry patentable weight, because, given a large enough opening of a jet pump with tapered surface the flexible apparatus by Houser et al is capable of performing the intended use. Note also that in the devices covered by Houser et al in [0191]-[0201] and illustrated by Figures 62-68 can all be used in the same manner and for similar purposes ([0201]).

*On claim 33:* the bellows mechanism comprises an elastic member coupling the lower portion of the tubular member to the upper portion of the weight ([0199]).

*On claim 34:* the bellows mechanism imparts a biasing force capable of restoring the guide rod to the predetermined, non-zero angle relative to the vertical axis of the apparatus body ([0199]).

### ***Response to Arguments***

14. Applicant's arguments filed 07/21/2009 have been fully considered but they are not fully persuasive.

a. The objection to the Specification has been overcome by amendment.



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- b. The ground of rejection under 35 U.S.C. 112, 1<sup>st</sup> paragraph, for introduction of new matter as set forth in section 4 of the prior Office action has also been overcome by said amendment.
- c. The ground of rejection under 35 U.S.C. 112, 1<sup>st</sup> paragraph, for introduction of new matter as set forth in section 5 of the prior Office action has been overcome by amendment to the claims.
- d. The ground of rejection under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, has been overcome because the ground of rejection set forth in section 4 of the prior office has been overcome.
- e. The ground of rejection under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, has been overcome because the ground of rejection set forth in section 5 of the prior office has been overcome.
- f. However, the combination of the recited tool and bellows constitutes new matter
- g. Said combination also necessitates a Drawings objection because of the absence of the identification of a tool in Figures 1 and 3, prompting an objection to Drawings of Figures 1 and 3.
- h. Furthermore, the biased, predetermined non-zero angle has not been specifically identified in said Figures either, prompting an objection to the Drawings of Figures 1 and 3.

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i. Also, several problems with lack of antecedent basis in the claims are identified in the rejections above, which rejections are herewith included by reference in response to arguments.

j. Applicant is again expressly alerted to the frequent reliance upon limitations of intended use, which, in the instant apparatus claim have very limited patentable weight. Examples of such limitations of intended use are "sized to be essentially fully inserted...." (lines 3-4); "for imparting gravitational force" (line 6); "configured to conduct the operation" (lines 13-14); "wherein, the biased, predetermined non-zero angle of the guide rod facilitates..." (lines 15-16); "wherein, after the guide rod is inserted into the jet opening.....to conduct the operation" (all of the final three lines of claim 11); And "wherein the bellows mechanism imparts a biasing force... apparatus body" (claim 34). Applicant is reminded that intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In re Casey, 152 USPQ 235 (CCPA 1967); In re Otto, 136 USPQ 458, 459 (CCPA 1963).

k. Finally, examiner notes the circumstance that the claimed subject matter is broad particularly because of the aforementioned functional language and further because of the lack of a positive recitation of any nuclear component. The

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ground of rejection under 35 U.S.C. 102(e) set forth in section 13 above is an immediate consequence of said circumstance.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHANNES MONDT whose telephone number is (571)272-1919. The examiner can normally be reached on 8-17.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHANNES MONDT/  
Primary Examiner, Art Unit 3663